

Abstract

An apparatus for feeding to an automated analyzer a bulk quantity of vessels is provided. The bulk vessel feeding apparatus has a frame structure, a vessel hopper and an elevator chain supported by the frame structure. The elevator chain is driven by a drive sprocket and carries a plurality of scoopers for transporting the vessels from the hopper to a sorting and orienting mechanism. The sorting and orienting mechanism has two actuated rams for ejecting the vessels from the scoopers into a guide, while sorting and orienting the vessels, such that they are all headed by their closed ends when traveling in the guide. The guide leads to an escape mechanism for dispensing the vessels one at a time to the analyzer.